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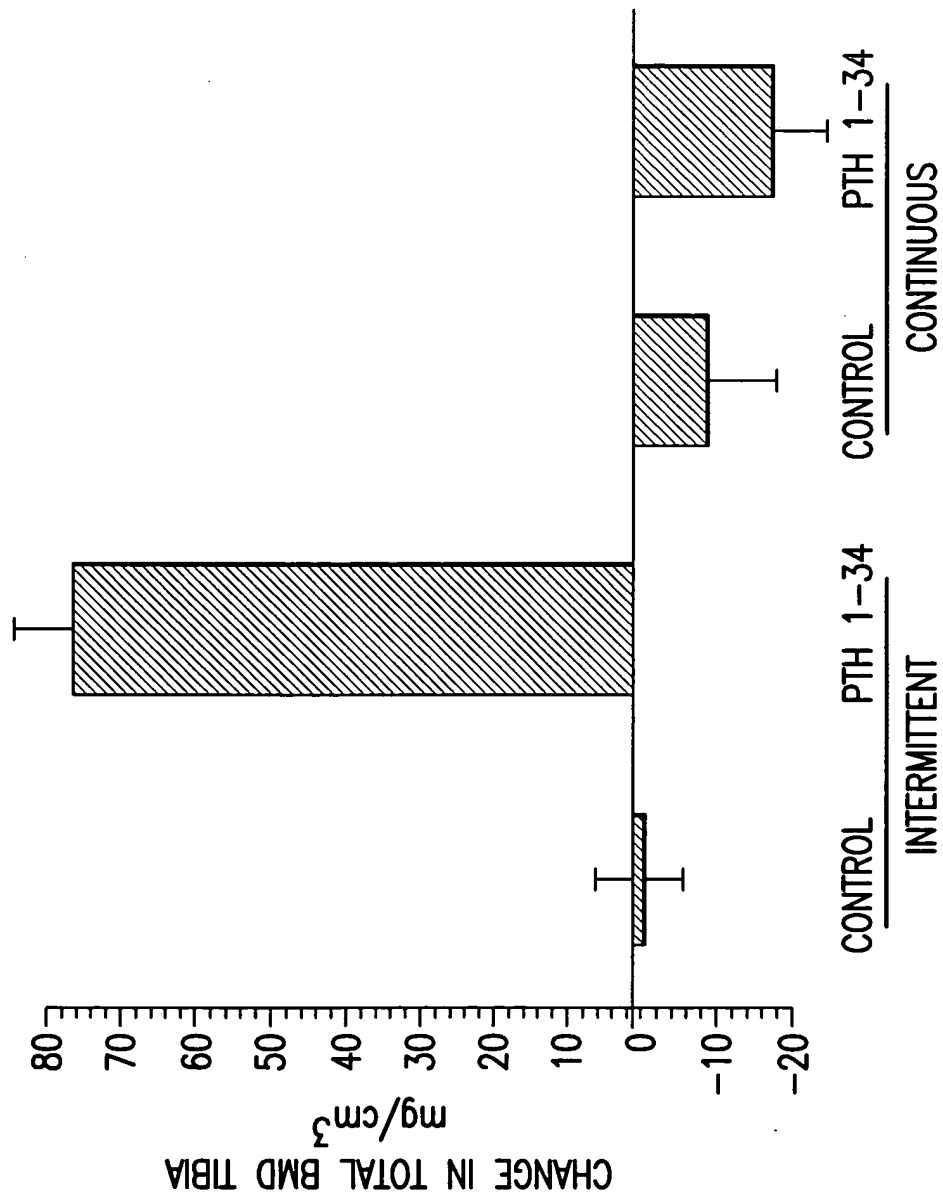


FIG.1

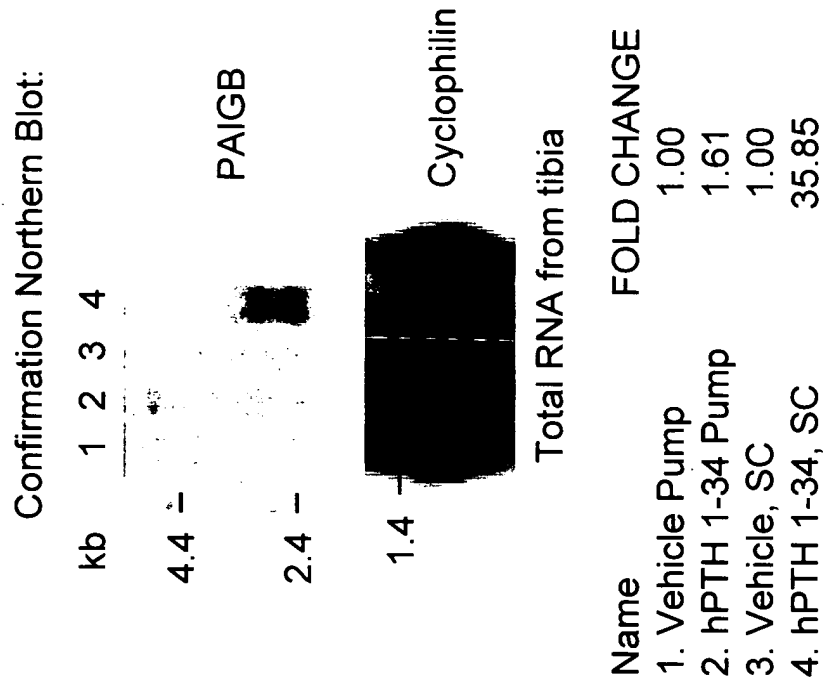


FIG.2B

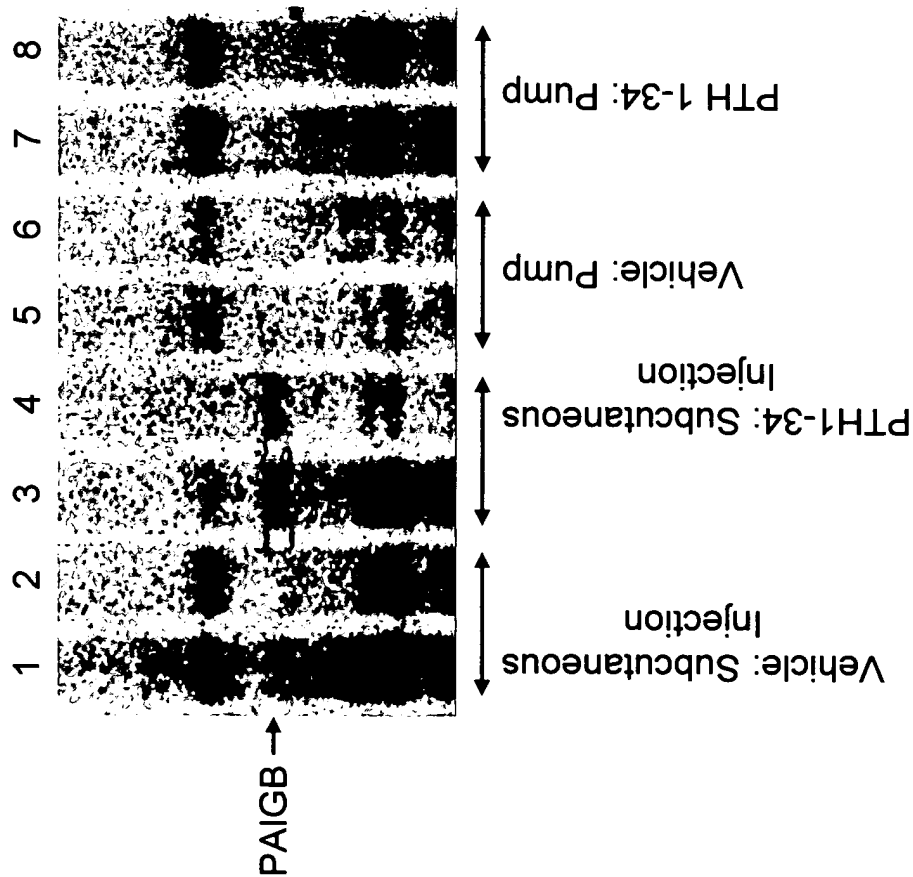


FIG.2A

		Section 1															
		(1)	1	10	20	30	40	50	60	70	82						
Human PAIGB 5UTR to Stop	(1)	GAGAGGGCGCGGCACTAGCGCGCGCGGCAACCGGAGGAGCTTCGCGCGCGCTCCAGCGCGCGGAGCGGGGACGGATGTC															
Mouse PAIGB 5UTR to Stop	(1)	-----AGAGAGGAGCGCGCGCGCGGAGCGCGCGCTGGCAGCGGCTTCGGCGGTTA-GGGGAC-CAATGTC															
Rat PAIGB 5UTR to Stop	(1)	-----GAGAGGAGCGCGCGGAGTTCCCGGAGCGCTGGCGGTGGGAGCGGCTTCGGCGGTTA-GGGGAC-CGATGTC															
Consensus	(1)	GA AGGGCGCGCGG CCGCGGAGCGCGCGCTGGCAGCGGCTTCGGCGGTTA GGGGAC CGATGTC															
		Section 2															
		(83)	83	90	100	110	120	130	140	150	164						
Human PAIGB 5UTR to Stop	(82)	GCGCGCGCGCGCTCCTT---GCGGCGCGCGGCTCGCGCTCCGGGCTGAGCGCGCGCGCGACAGCGCGAGCAGCGCGCT															
Mouse PAIGB 5UTR to Stop	(65)	GCTGCGCGCGCTCCTCTCGGGGCGCGGAGCTGCGCTCGCGCGCGCTGAGCAGCGGACAGCGCGCAAGCGCGAGCGCGCGC															
Rat PAIGB 5UTR to Stop	(72)	GCTGCGCGCGCTCCTCTCGAGGCGCGGAGCTGCGCTCGCGCGCGCTGAGCGCGGAGCGCGCAAGCGCGAGCGCGCGCT															
Consensus	(83)	GCTGCGCGCGCTCCTCTCG GGGCGGAGCTGCGTGGCGCGGCTGAGCGGAGCGGACAGCGCGAAGCGGAGCGCGCGCT															
		Section 3															
		(165)	165	170	180	200	210	220	230	246							
Human PAIGB 5UTR to Stop	(161)	GCGCGCTCCCGCGCGGAGGAGGATGGGCTGCGCGCGGAGCGCGGGGATGCCATCGAGCGCGCGCTACTACGAGAGTGGAC															
Mouse PAIGB 5UTR to Stop	(147)	GCGCGCGCGCGCAACAGCGGAGGATGGGCTGCGCGCGGAGCGCGGAGCGGATGCCATCGAGCGCGCGCTACTACGAGATTGGAC															
Rat PAIGB 5UTR to Stop	(154)	GCGCGCGCGCGCAACAGCGGAGGATGGGCTGCGCGCGGAGCGCGGAGCGGATGCCATCGAGCGCGCGCTACTATGAGAGTGGAC															
Consensus	(165)	GCGCGCGCGCGCAACAGCGGAGGATGGGCTGCGCGCGGAGCGCGGAGCGGATGCCATCGAGCGCGCGCTACTACGAGAGCTGGAC															
		Section 4															
		(247)	247	260	270	280	290	300	310	328							
Human PAIGB 5UTR to Stop	(243)	CCGGGAGACAGAA TCCACCTGGCTACCTACACCGACTCGGAGCGCGCGCGCGCGCGCGGACAGCGGGCCCCGAA															
Mouse PAIGB 5UTR to Stop	(229)	CCGGGAGACGAGTCCACCTGGCTACCTACACCGACTCGGAGCGCGCTGGCGAGCGCGCGCGGACAGCGGGCCCCGAG															
Rat PAIGB 5UTR to Stop	(236)	CCGGGAGACCGAGTCCACCTGGCTACCTACACCGACTCGGAGCGCGCTGGCGAGCGCGCGCGGACAGCGGGCCCCGAG															
Consensus	(247)	CCGGGAGAC GAGTCCACCTGGCTACCTACACCGACTCGGAGCGCGCTGGCGAGCGCGCGGACGCGGACAGCGGGCCCCGAG															

FIG.3

		Section 5										
		(329)	329	340	350	360	370	380	390	400	410	
Human	PAIGB 5UTR to Stop	(325)	GGGGGGCC	TGCAC	TGGGCA	TGCTGGAAGATGGAC	TGCCCTCCAA	TGG	TGCCCCG	ATCTACAG	CCCCAGGTGGAATAC	
Mouse	PAIGB 5UTR to Stop	(311)	GGGGGGCC	TGCAC	GGGGTG	TGCTGGAAGACGGAC	TGTCTCTTAAC	GGGTGCT	CCGAC	TG	CAGCCCCGGGTGGAATAG	
Rat	PAIGB 5UTR to Stop	(318)	GGGGGGCC	TGCAC	GGGGTG	TGCTGGAAGACGGCCG	TCTCTTAAC	GGGTGCT	CCGAC	TG	CAGCCCCAGGTGGAATAG	
	Consensus	(329)	GGGGGGCC	TGCAC	GGGGTG	TGCTGGAAGACGGACTG	TCTCTTAACGG	TGTC	TCCGACCTGC	AGCCCCAGGTGGAATAG		
		Section 6										
		(411)	411	420	430	440	450	460	470	480	492	
Human	PAIGB 5UTR to Stop	(407)	CCAA	CCGAGAGAGAA	ACCA	ACTGTGAG	ACCAGTCC	CCAAAT	TCCC	CAGAGCC	TCACTCAGGCCCTCTGACCCAGAAACA	
Mouse	PAIGB 5UTR to Stop	(393)	CCA	CCGAGAGAGAA	GAA	TCAACTGTGG	ACCCAA	TG	TCCAACT	CAAGAC	ACCTCAGCTCAGGCCCTCTGACCCAGAAACA	
Rat	PAIGB 5UTR to Stop	(400)	CCA	CCGAGAGAGAA	GAA	TCAACTGTGG	ACCCAA	TG	TCCAACT	CAAGAC	ACCTCAGCTCAGGCCCTCTGACCCAGAAACA	
	Consensus	(411)	CCA	CCGAGAGAGAA	GAA	TCAACTGTGGGACCCAA	TG	TCCC	AACTCA	CAGAGCC	TCACTCAGGCCCTCTGACCCAGAAACA	
		Section 7										
		(493)	493	500	510	520	530	540	550	560	574	
Human	PAIGB 5UTR to Stop	(489)	GAATGG	CCCTTCAG	ATCCACAGAGGCTAA	AAGAGATGCT	TAAGAGATG	CCCTG	CAAAAGAGAGT	CAACATTTAA	TGTACAGATAGC	
Mouse	PAIGB 5UTR to Stop	(475)	GAATGG	CCCTTC	TGGCCACAGAGGCTAA	GAGGATGCT	TAAGCGGATG	CTG	CAAGAGAGT	CGCTATTTAA	CGTTACAGAGAAAT	
Rat	PAIGB 5UTR to Stop	(482)	GAATGG	CCCTTC	TGGCCACAGAGGCTAA	AAGGATGCT	TAAGCGGATG	CTG	CAAGAGAGT	CGCTATTTAA	CGTTACAGAGAAAT	
	Consensus	(493)	GAATGG	CCCTTTGG	ACCACAGAGGCTAA	AAGGATGCT	TAAGCGAATG	CTGCAAGAGAGT	TCGCTATTAA	CGTACAGAGAAAT		
		Section 8										
		(575)	575	580	590	600	610	625				
Human	PAIGB 5UTR to Stop	(571)	ATCC	AAACAGATGG	CACAGAGT	TGG	AAGAAATC	ACAA	AAGAACTG	TG	TCAAAC	TAG
Mouse	PAIGB 5UTR to Stop	(557)	ATTCC	GCAGATGG	CACAGAGTAA	AAAGGTC	ACCA	AAGAACTG	CA	TCAA	TTTAG	
Rat	PAIGB 5UTR to Stop	(564)	ATCC	GCAGATGG	CACAGAGTAA	AAAGGTC	ACCA	AAGAACTG	CA	TCAA	TTTAG	
	Consensus	(575)	ATCCGC	GAGATGG	CACAGAGTAA	AAGGTCACA	AAGAACTGCA	TCAATTAG	← Stop			

FIG.3-1

		Section 1									
		(1)	1	10	20	30	40	50	63		
Human PAIGB	(1)	MCGGSRADA	IEPRYYES	WTRETEST	WLTYTDS	DA	PPSAAA	PD	SGPEAGGL	SGM	EDGLPSN
Mouse PAIGB	(1)	MCGGSRADA	IEPRYYES	WTRETEST	WLTYTDS	DA	PPSAAA	PD	SGPEAGGL	HAGV	LEDGLSSN
Rat PAIGB	(1)	MCGGSRADA	IEPRYYES	WTRETEST	WLTYTDS	DA	PPSAAA	PD	SGPEAGGL	HAGV	LEDGLSSN
Consensus	(1)	MCGGSRADA	IEPRYYES	WTRETEST	WLTYTDS	DA	PPSAAA	PD	SGPEAGGL	HAGV	LEDGLSSN
		Section 2									
		(64)	64	70	80	90	100	110	126		
Human PAIGB	(64)	GVP	RSTAPCG	I	PNPEK	TNCE	TQCPN	QSSG	PLTQKQNG	LQ	TEAKRDAKRM
Mouse PAIGB	(64)	GVL	RPAA	PCG	I	ANPEK	K	NC	TQCPN	QSSG	PLTQKQNG
Rat PAIGB	(64)	GVL	RPAA	PCG	I	ANPEK	K	NC	TQCPN	QSSG	PLTQKQNG
Consensus	(64)	GVL	RPAA	PCG	I	ANPEK	K	NC	TQCPN	QSSG	PLTQKQNG
		Section 3									
		(127)	127	146							
Human PAIGB	(127)	TDS	IQQMDRS	R	ITKNC	Q	M				
Mouse PAIGB	(127)	TEN	IQQMDRS	R	ITKNC	Q	M				
Rat PAIGB	(127)	TEN	IQQMDRS	R	ITKNC	Q	M				
Consensus	(127)	TEN	IQQMDRS	R	ITKNC	Q	M				

FIG.4

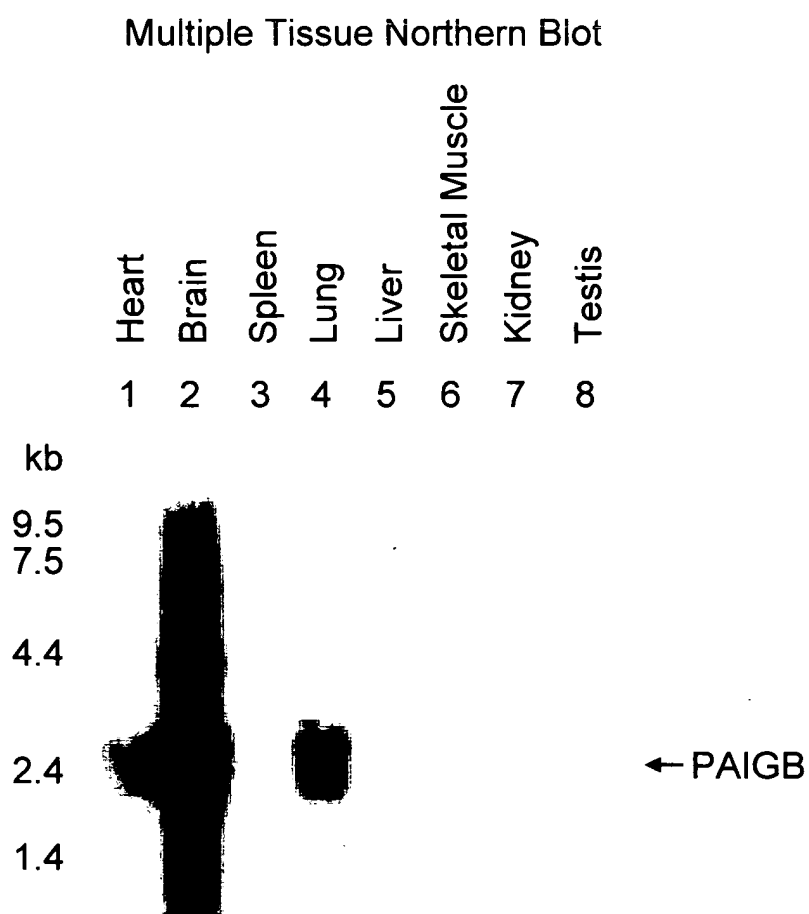


FIG.5

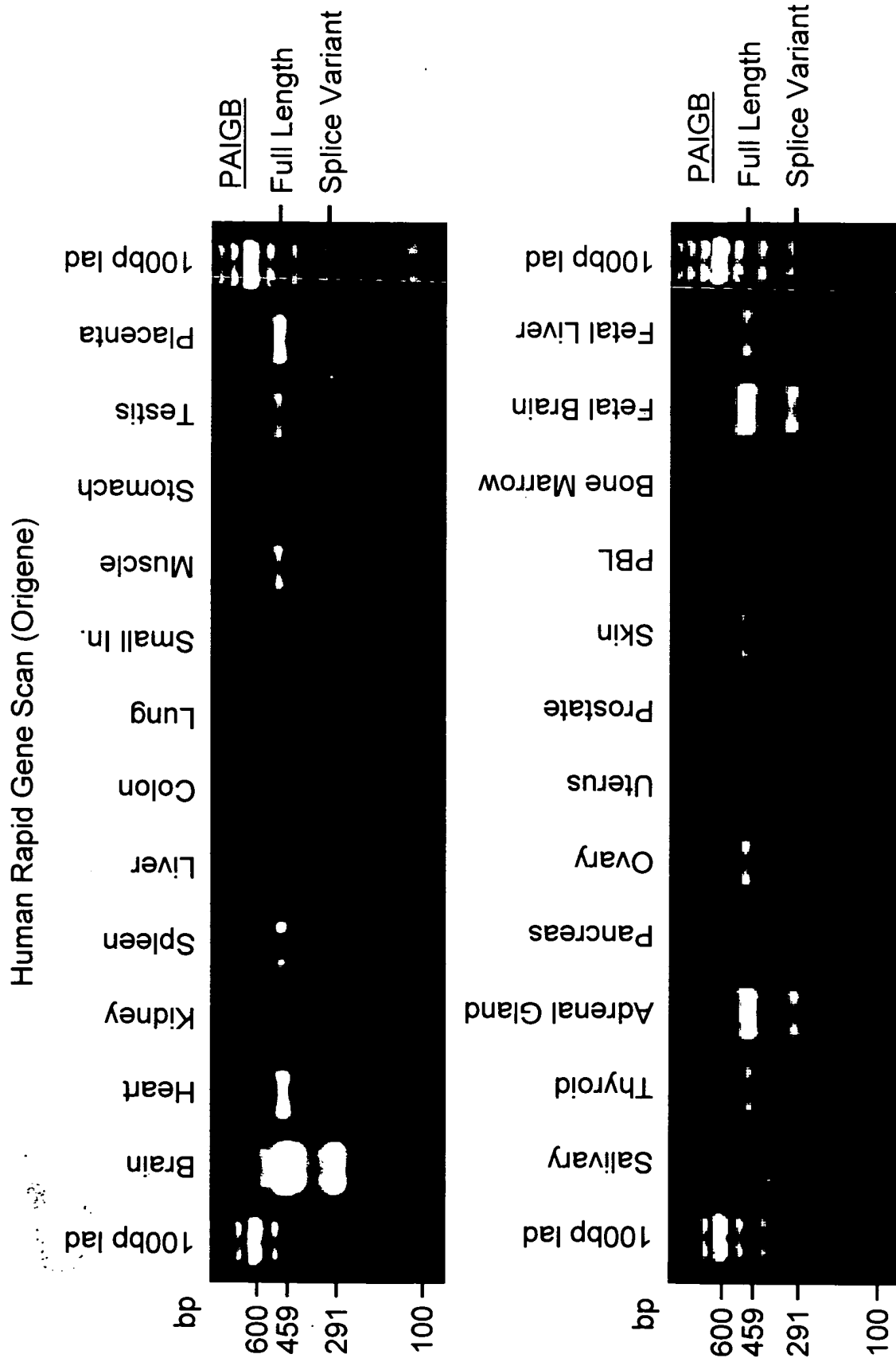


FIG.6

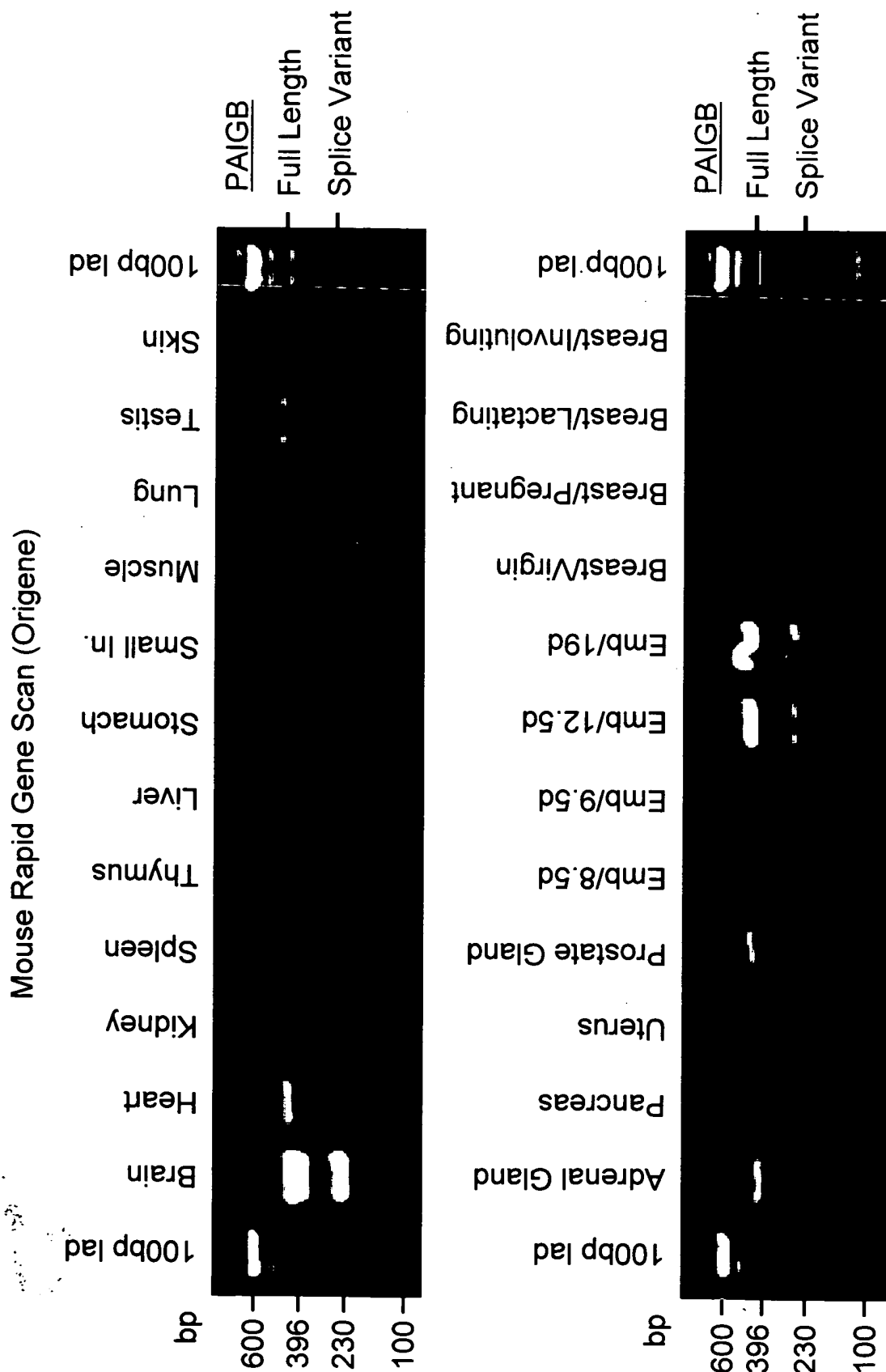


FIG. 7

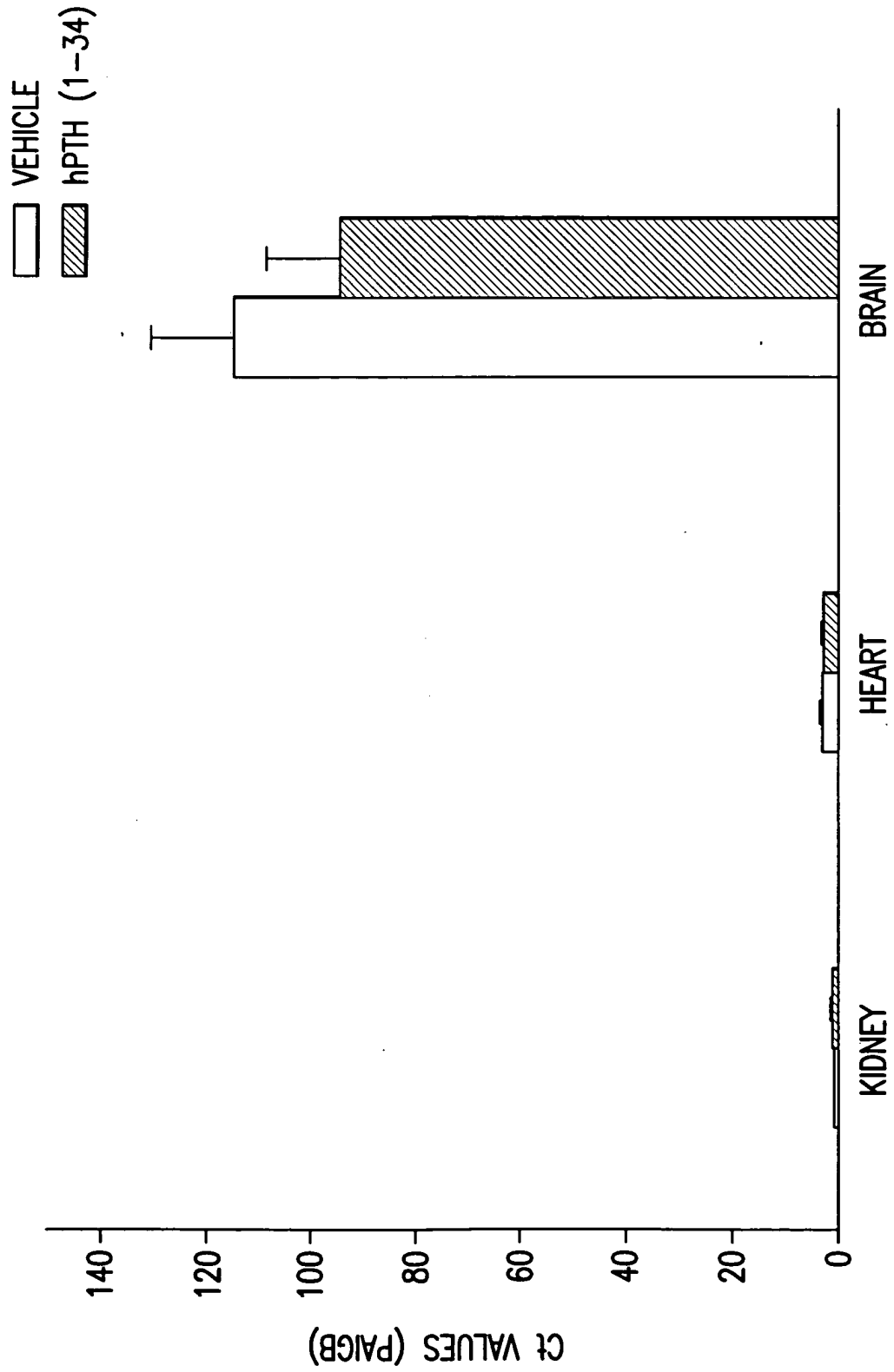


FIG.8

PTH (1-34)100ug/kg, 1/d/s.c. 30d
 bone: Parietal bone

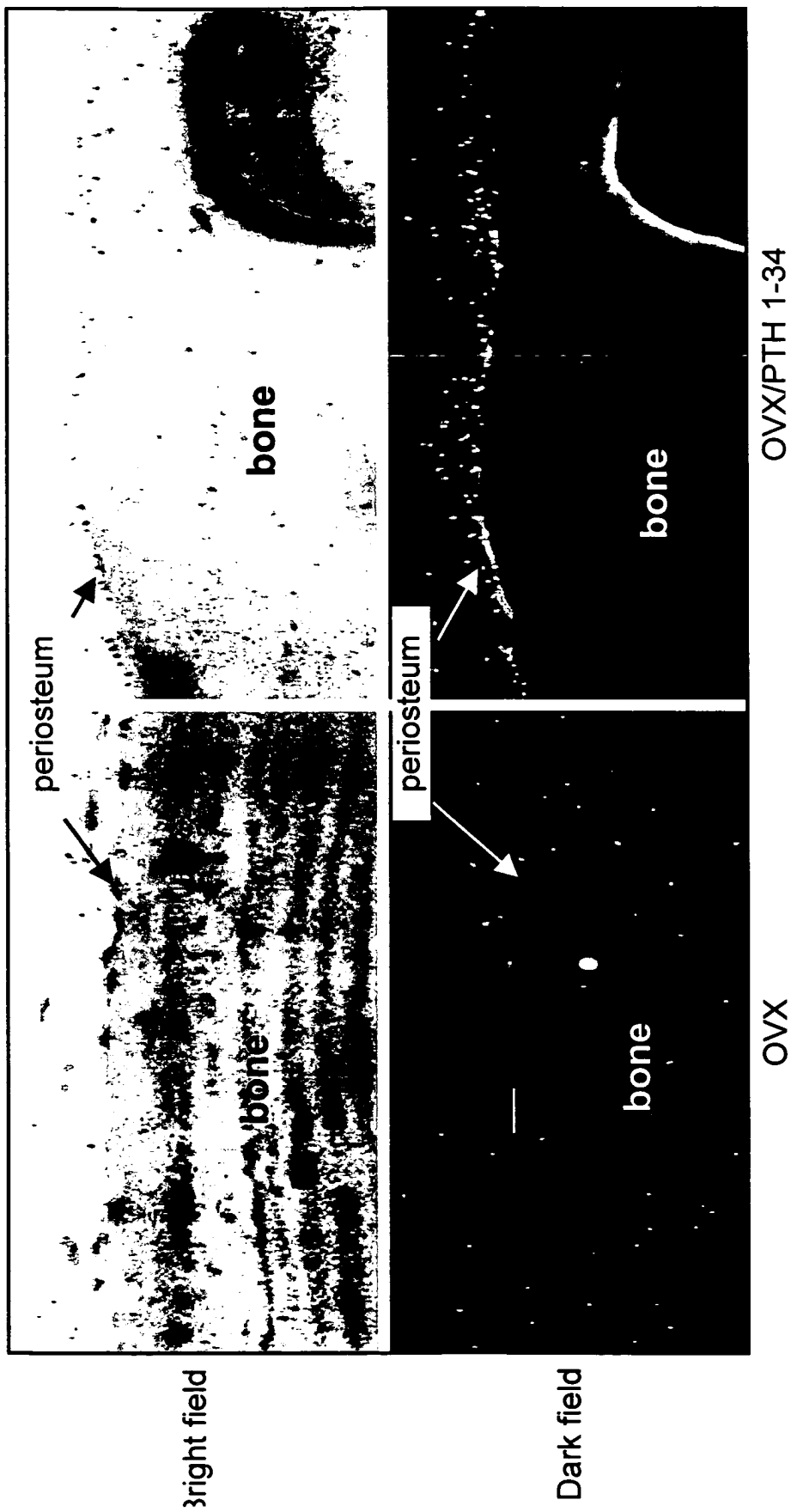


FIG.9

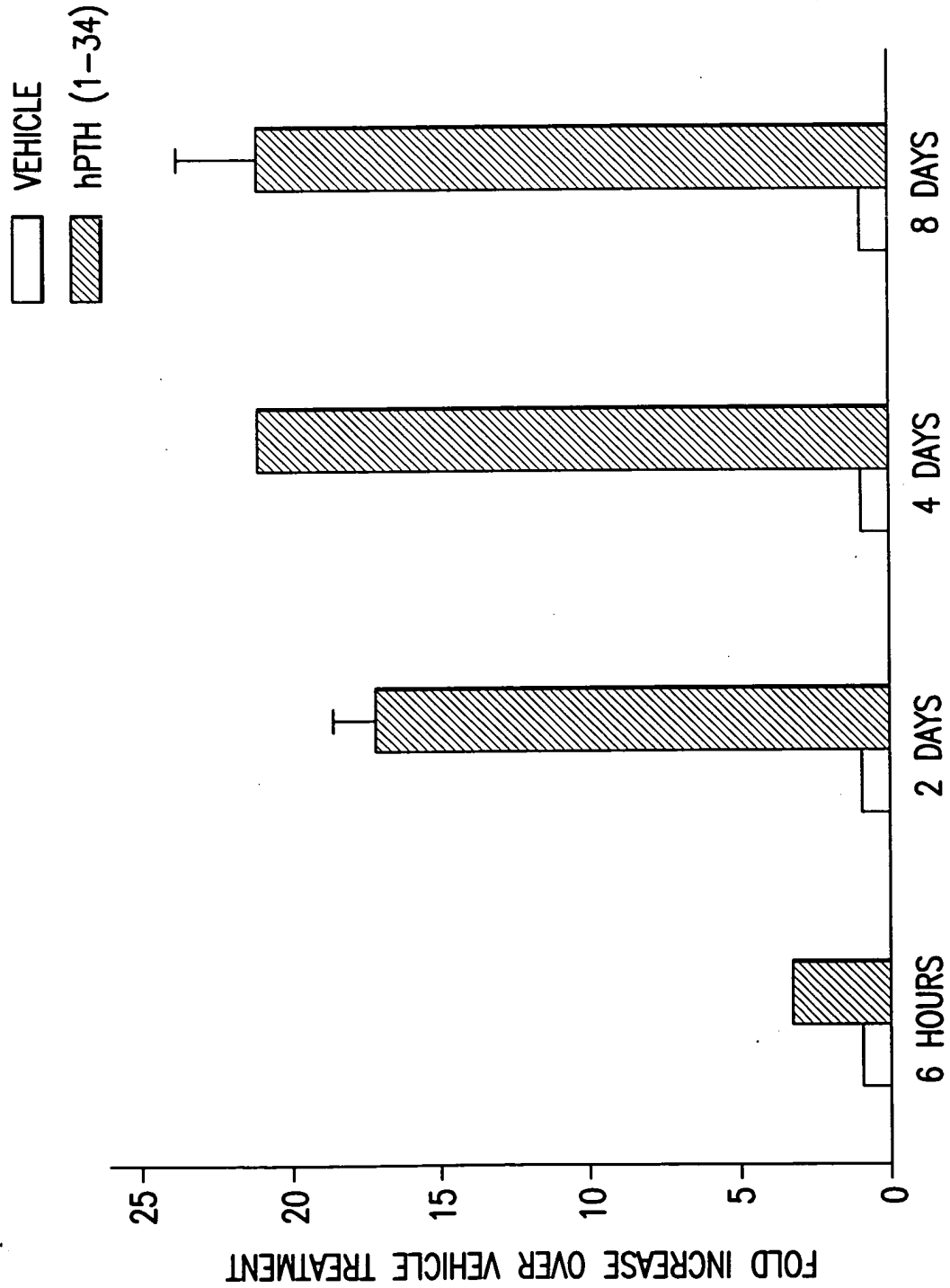


FIG. 10A

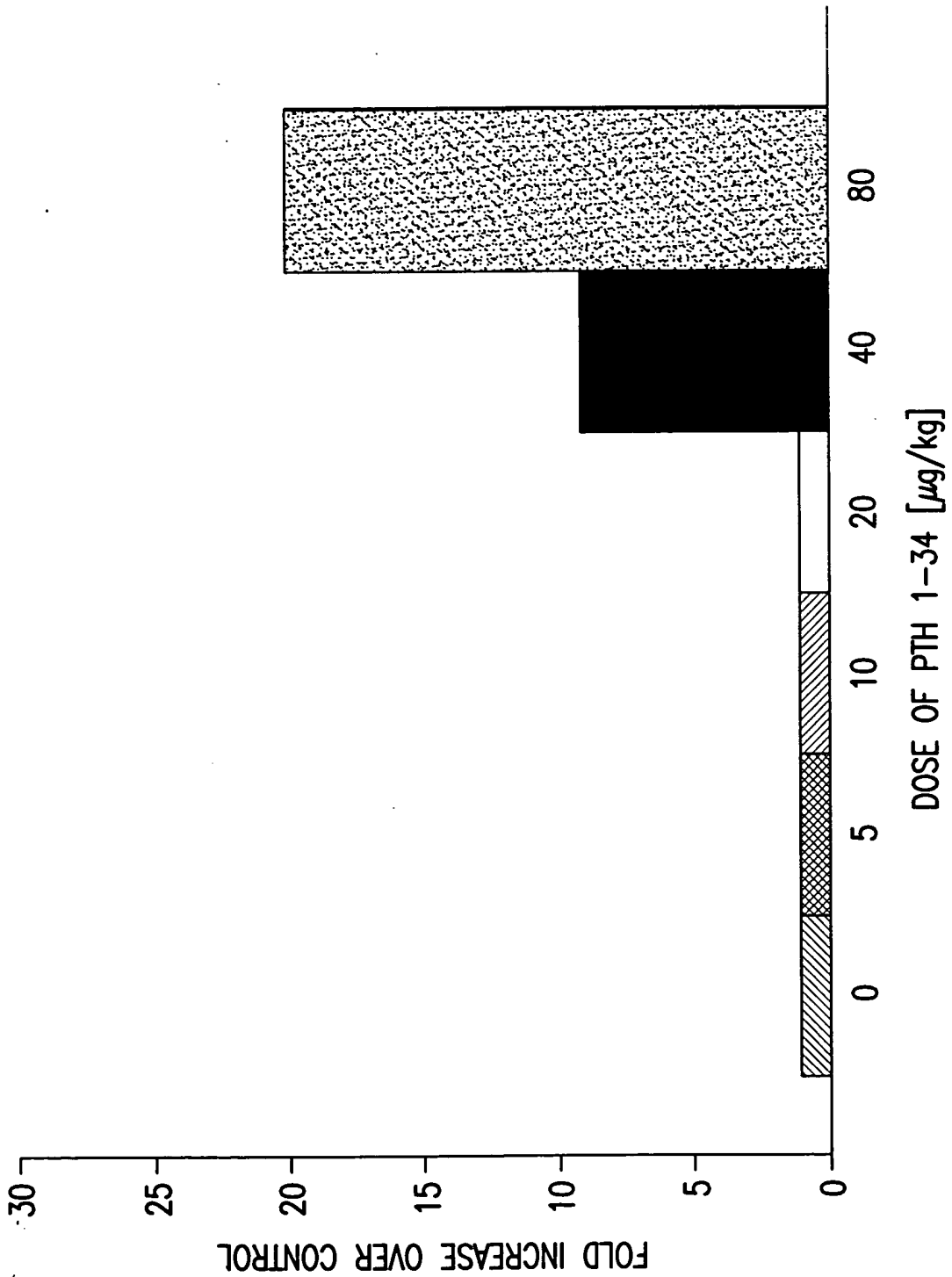


FIG. 10B

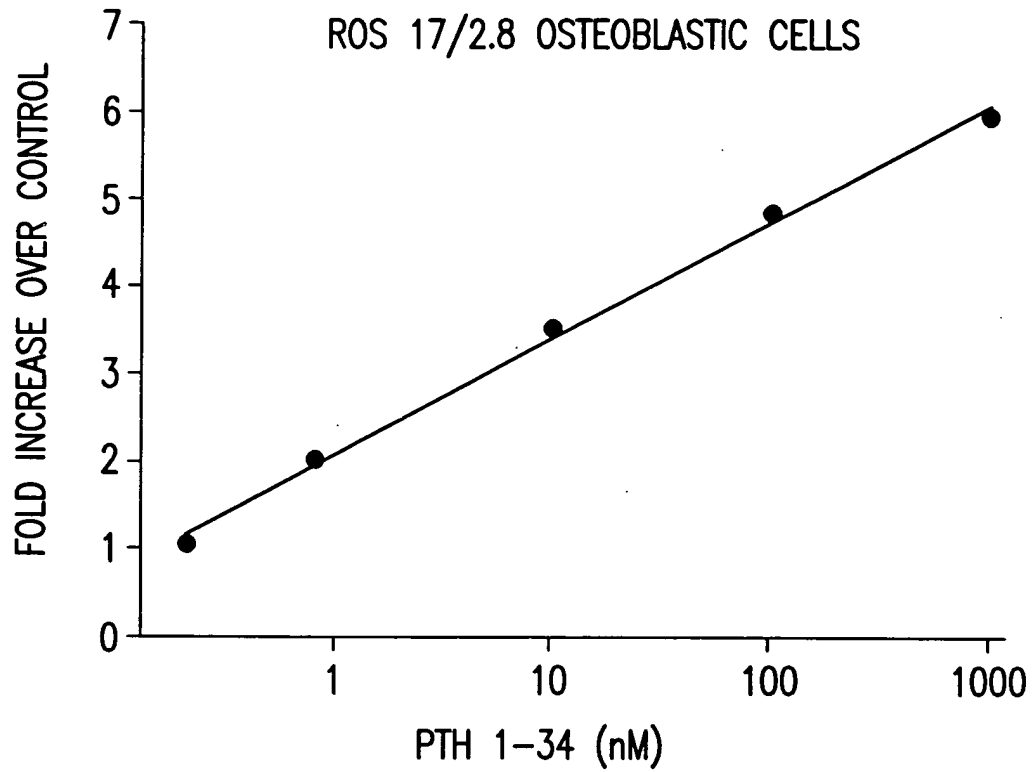


FIG. 11A

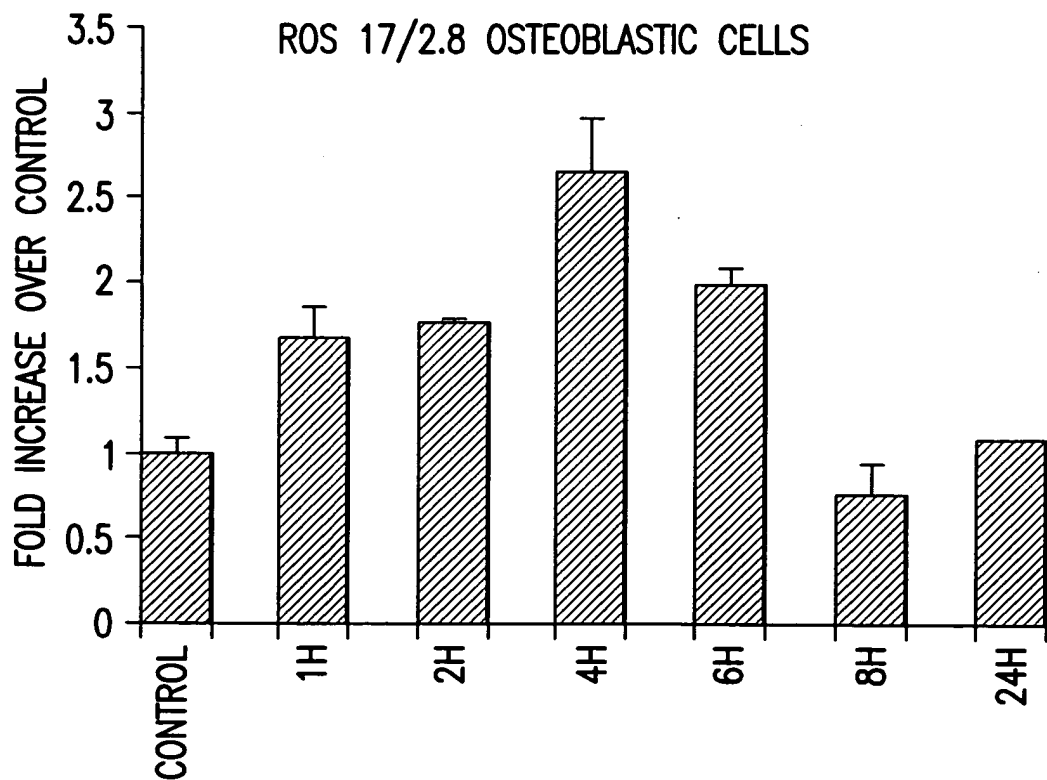


FIG. 11B

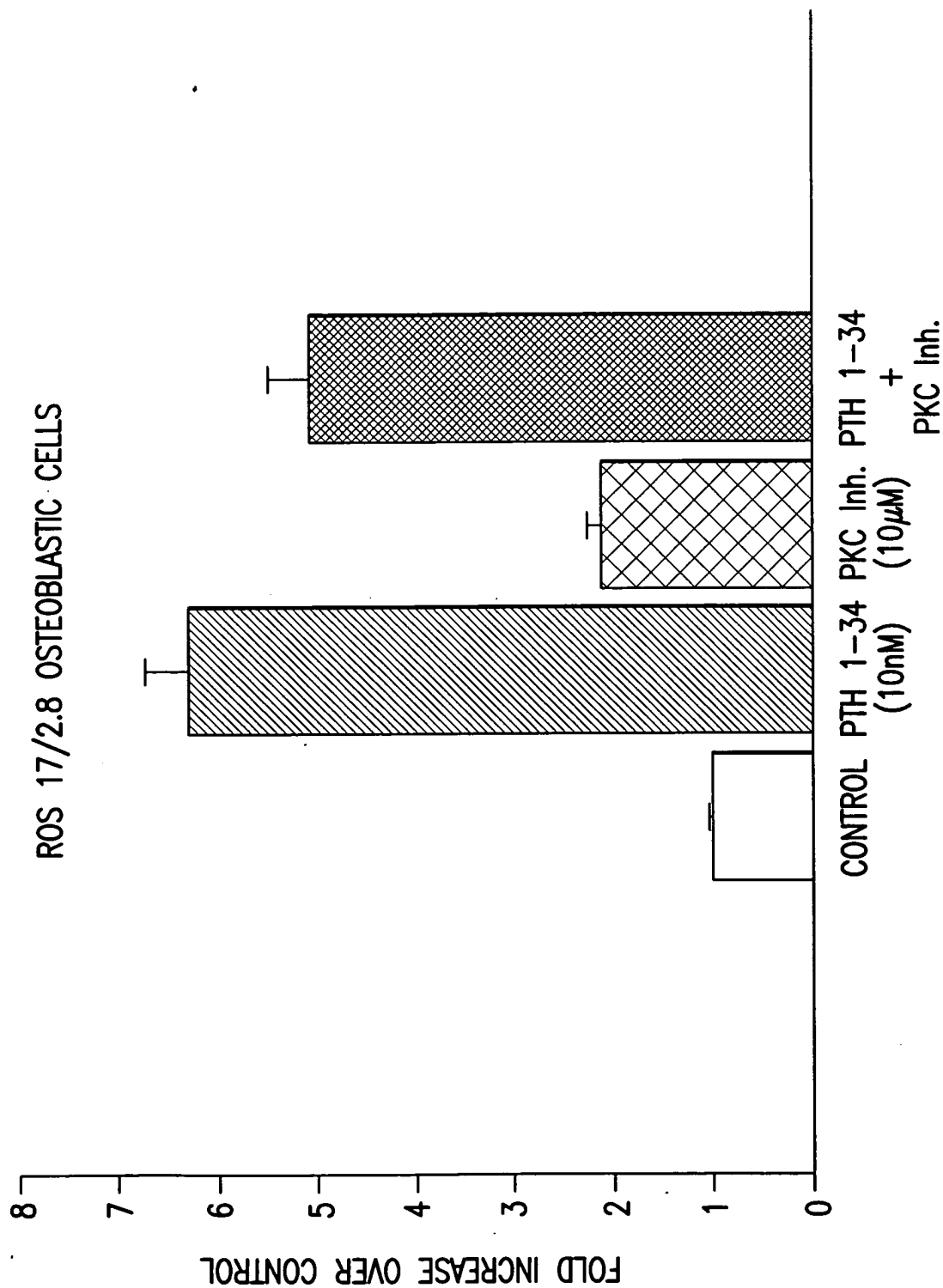


FIG.12

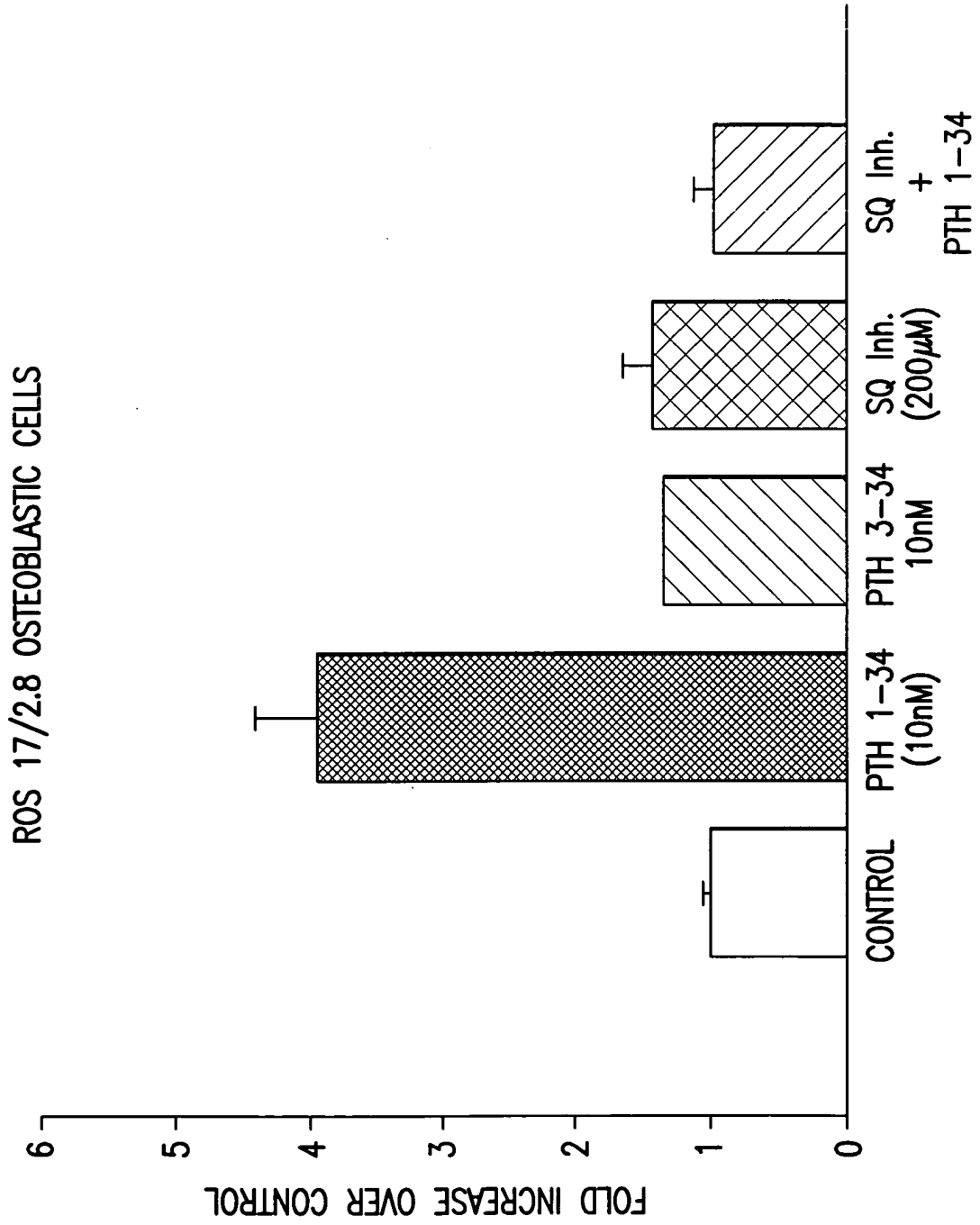


FIG.13

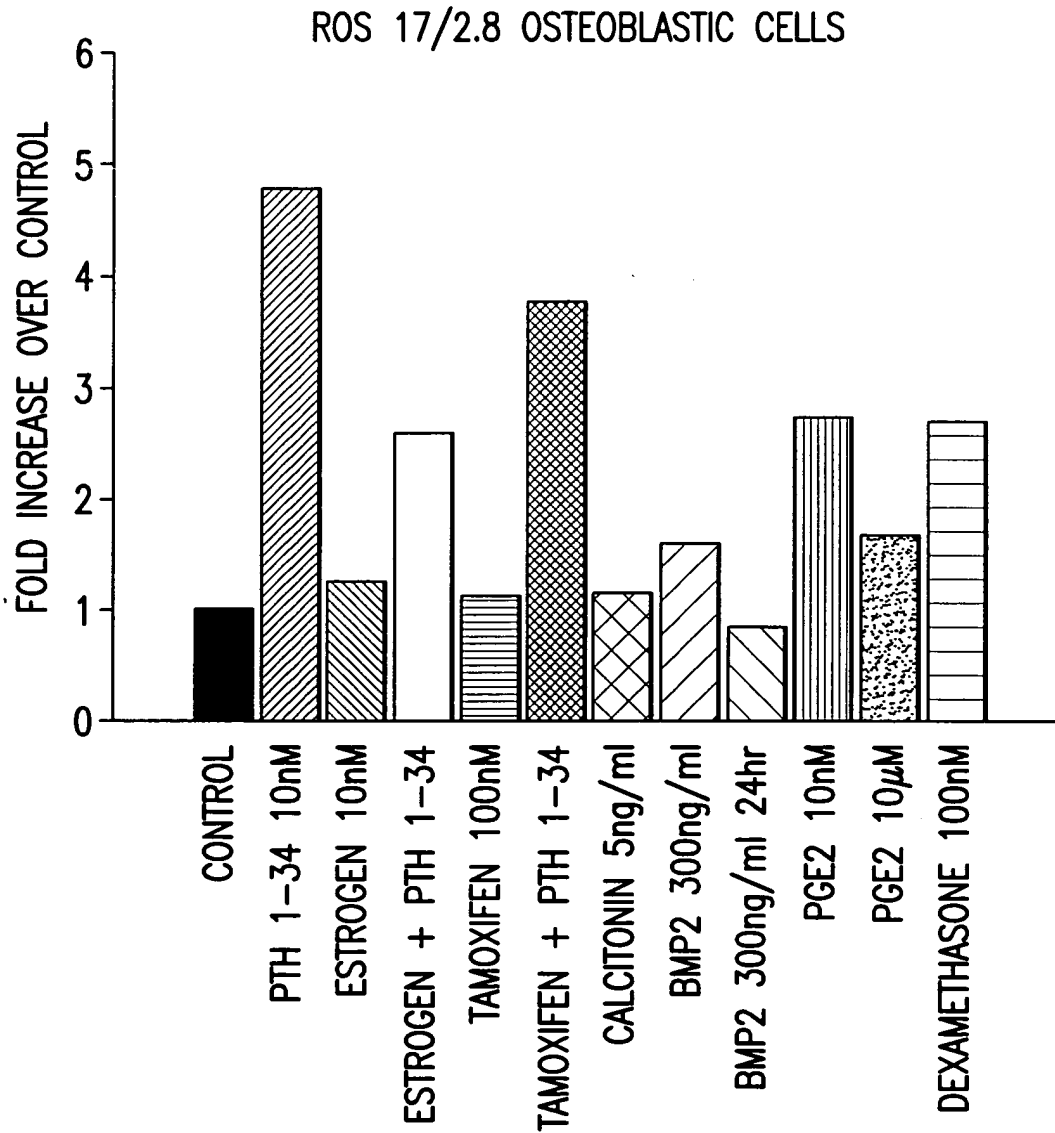


FIG. 14

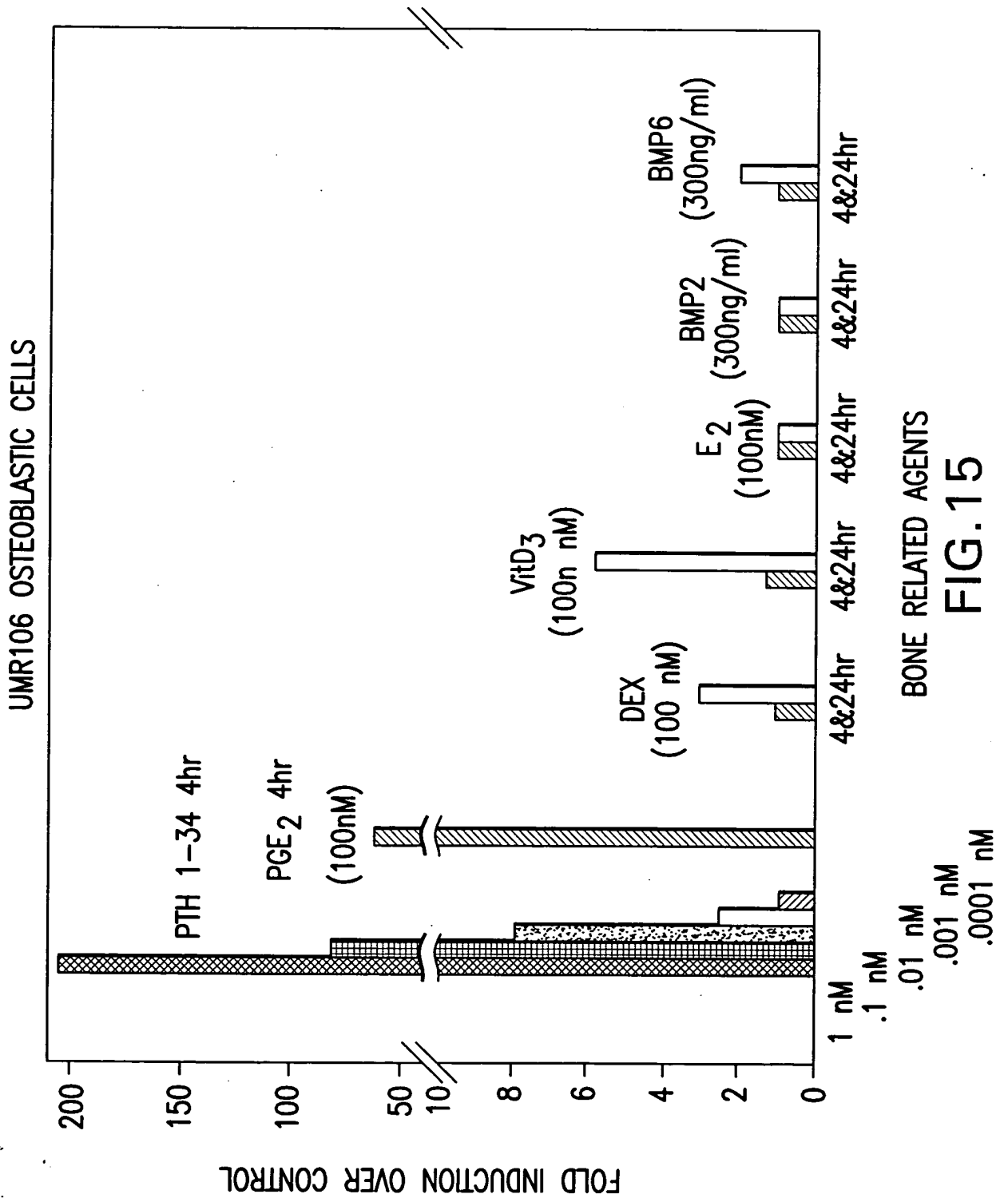




FIG.16A

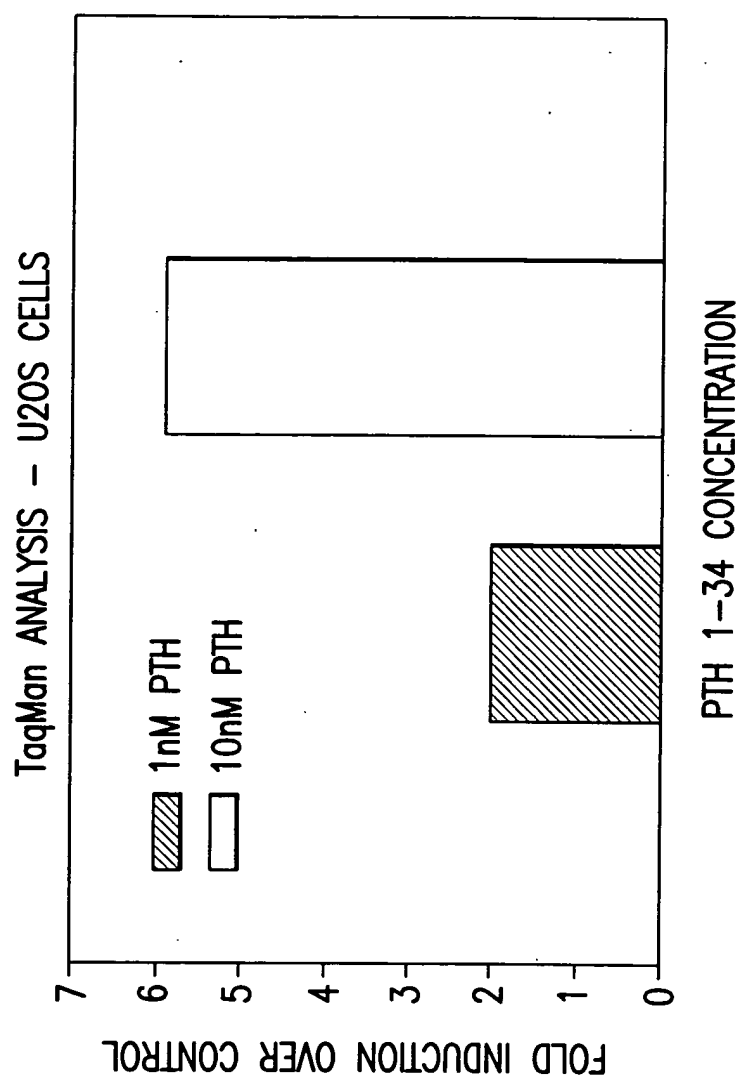


FIG.16B

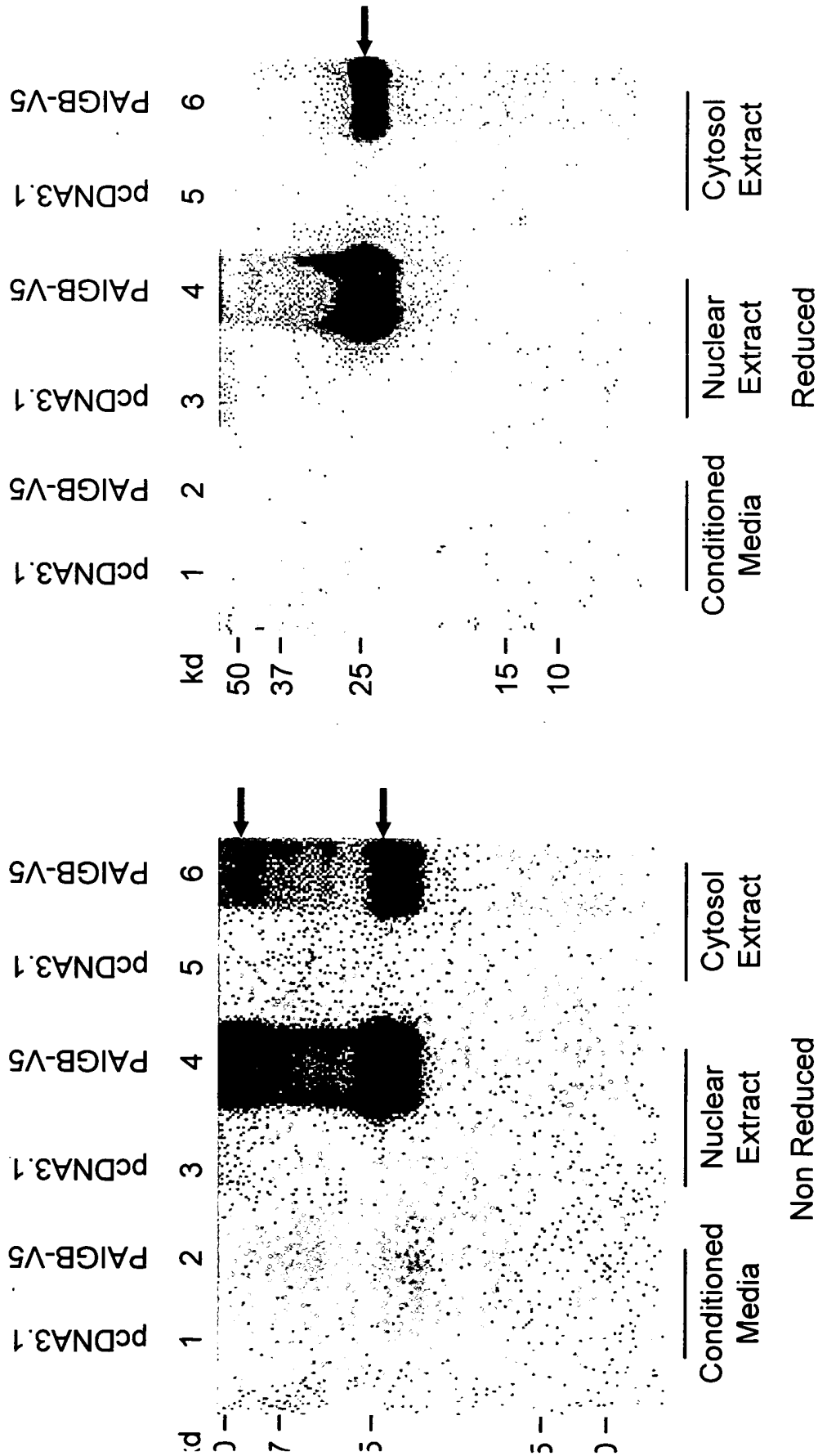


FIG.17

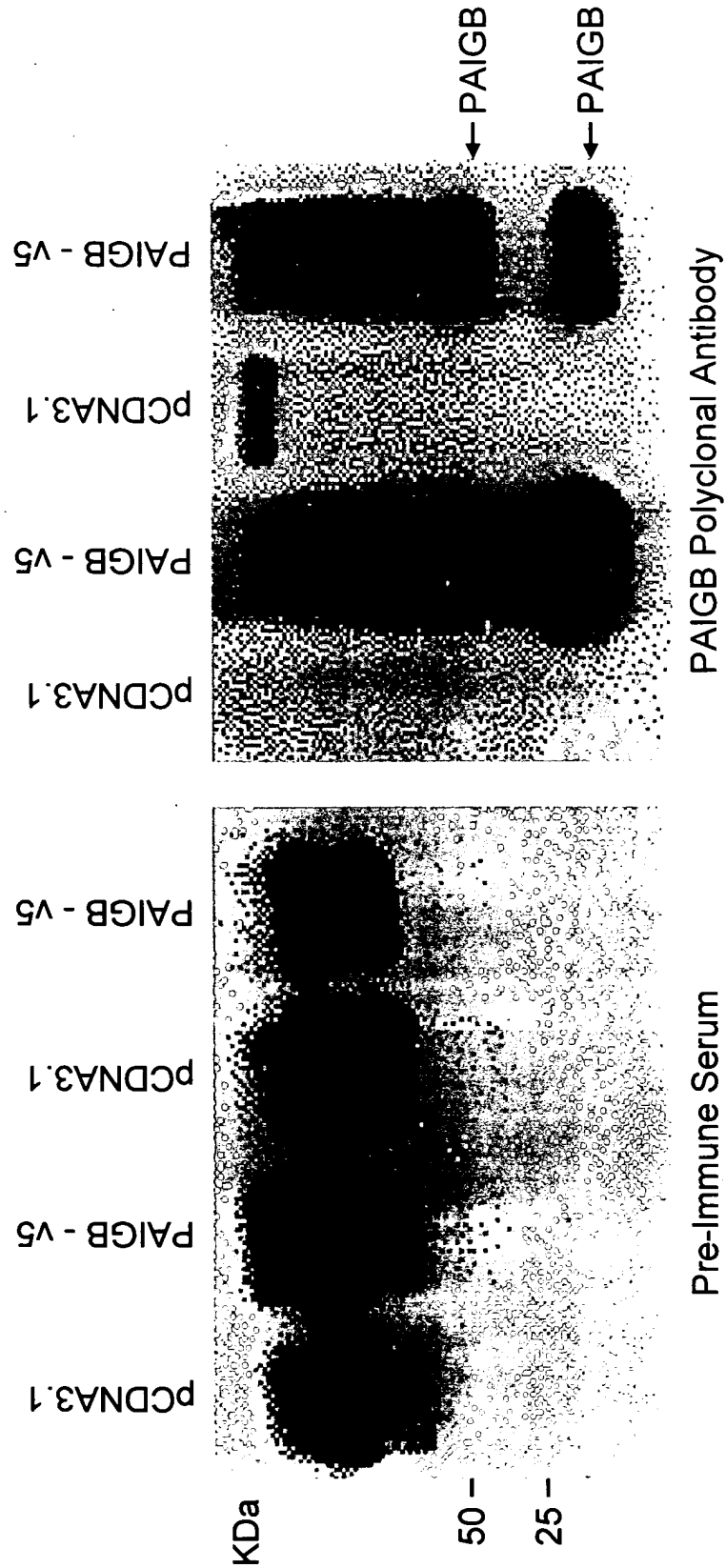


FIG.18



FIG.19

PAIGB Polyclonal Antibody
PTH:1-34 (20ug/kg, 1/d/s.c.) for 18d

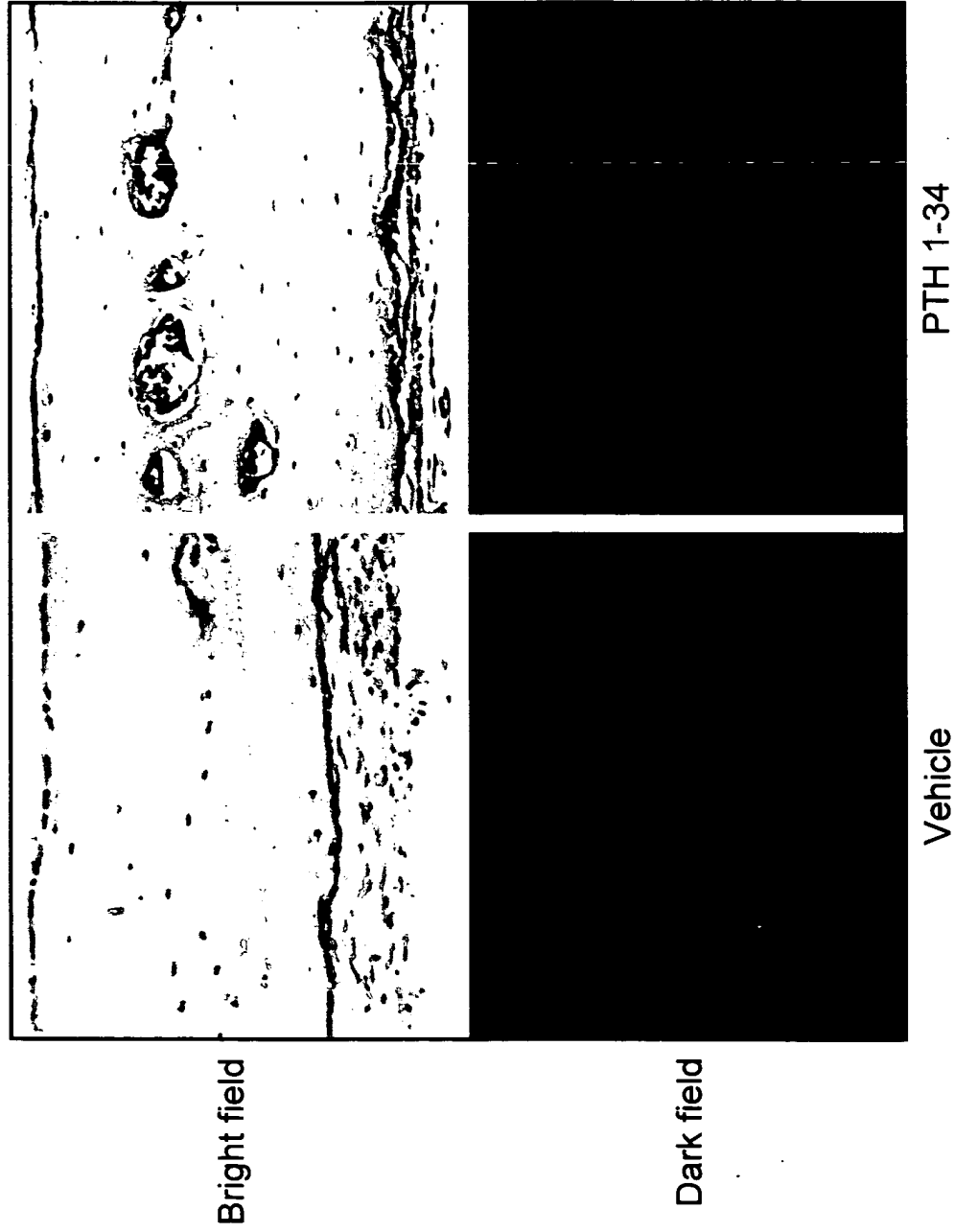


FIG.20

PAIGB Polyclonal Antibody
PTH:1-34 (20ug/kg, 1/d/s.c.) for 18d

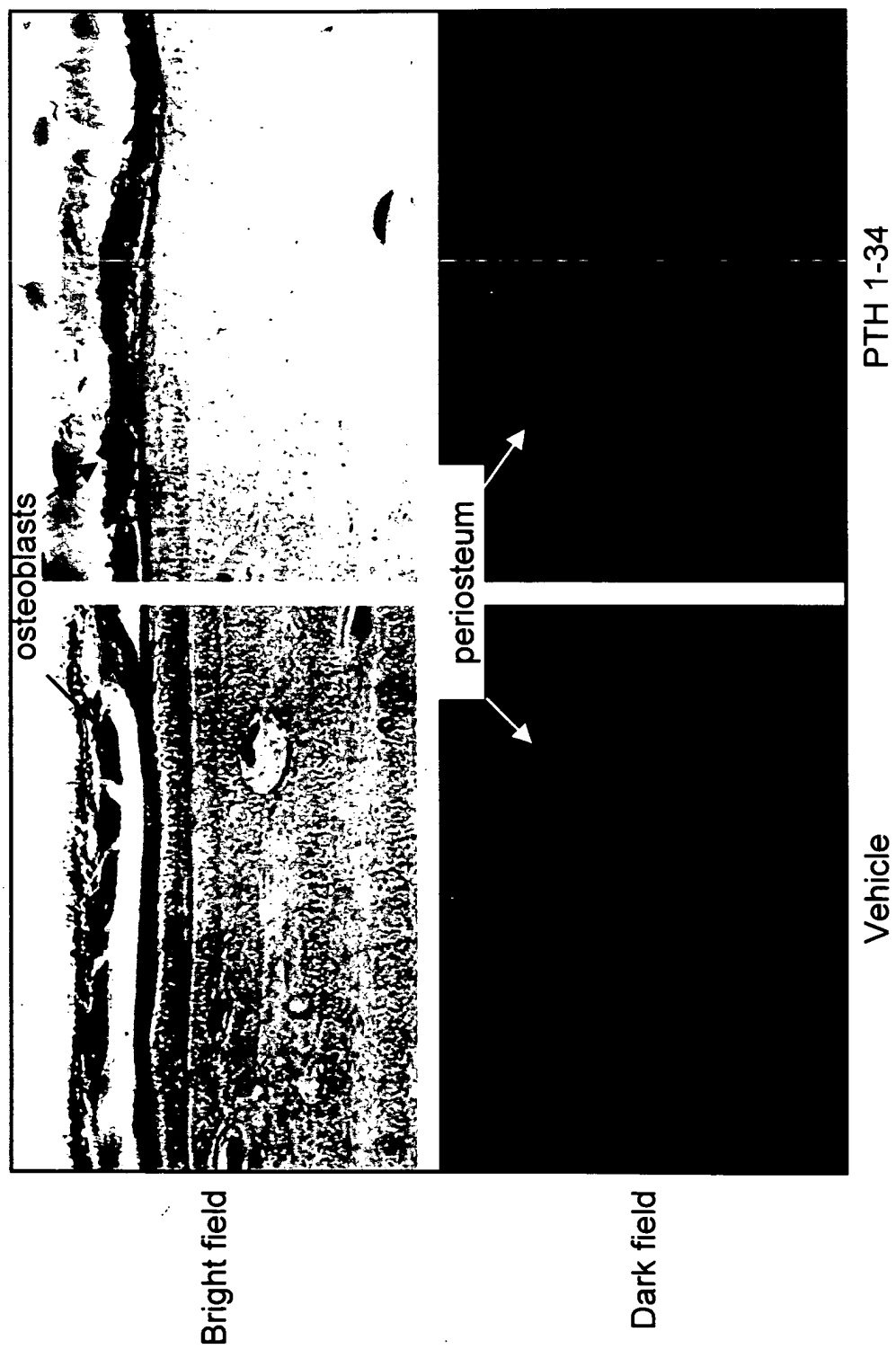


FIG.21

PAIGB Polyclonal Antibody
PTH:1-34 (20ug/kg, 1/d/s.c.) for 18d

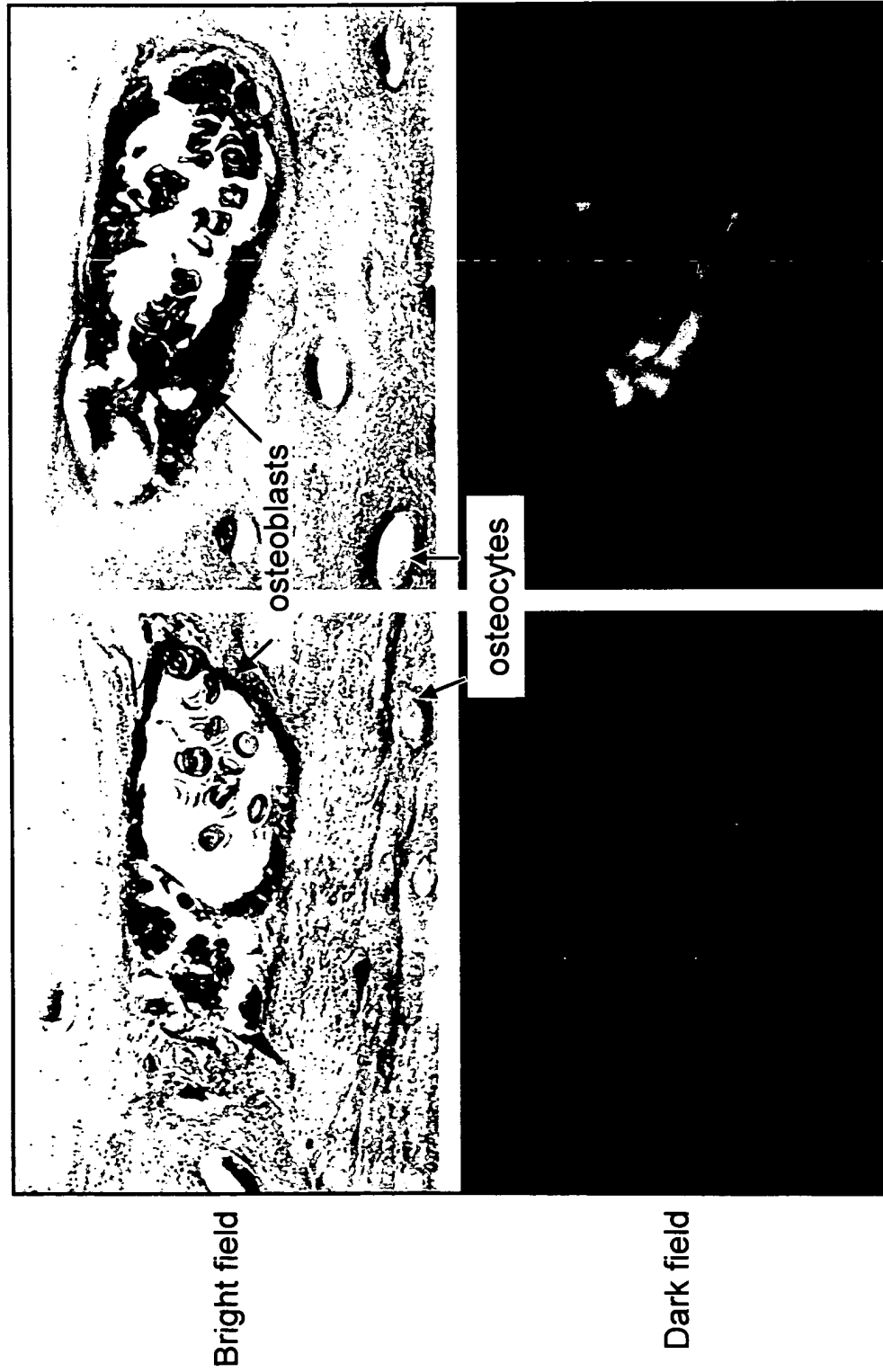


FIG.22

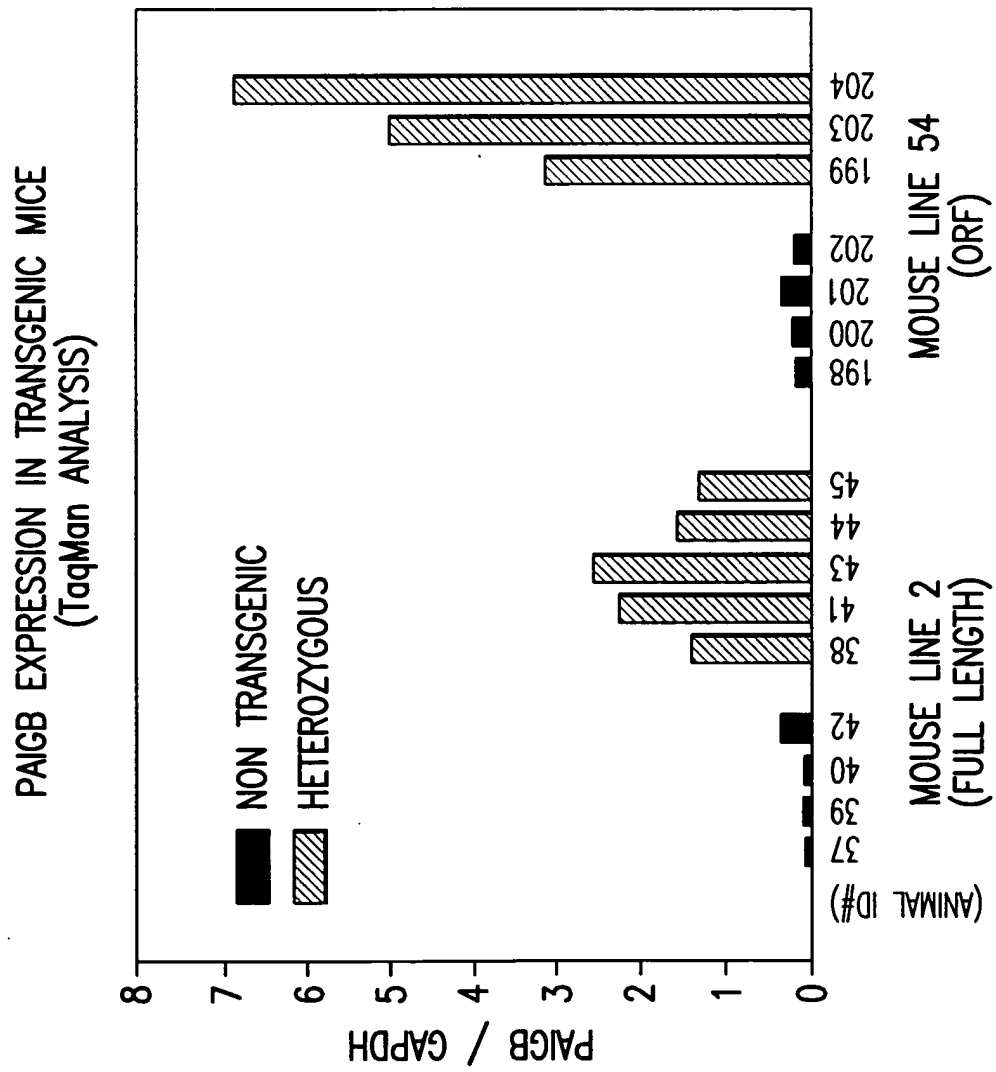


FIG.23

PAIGB Protein Expression
PAIGB Mice: Line 2 (9 wk)

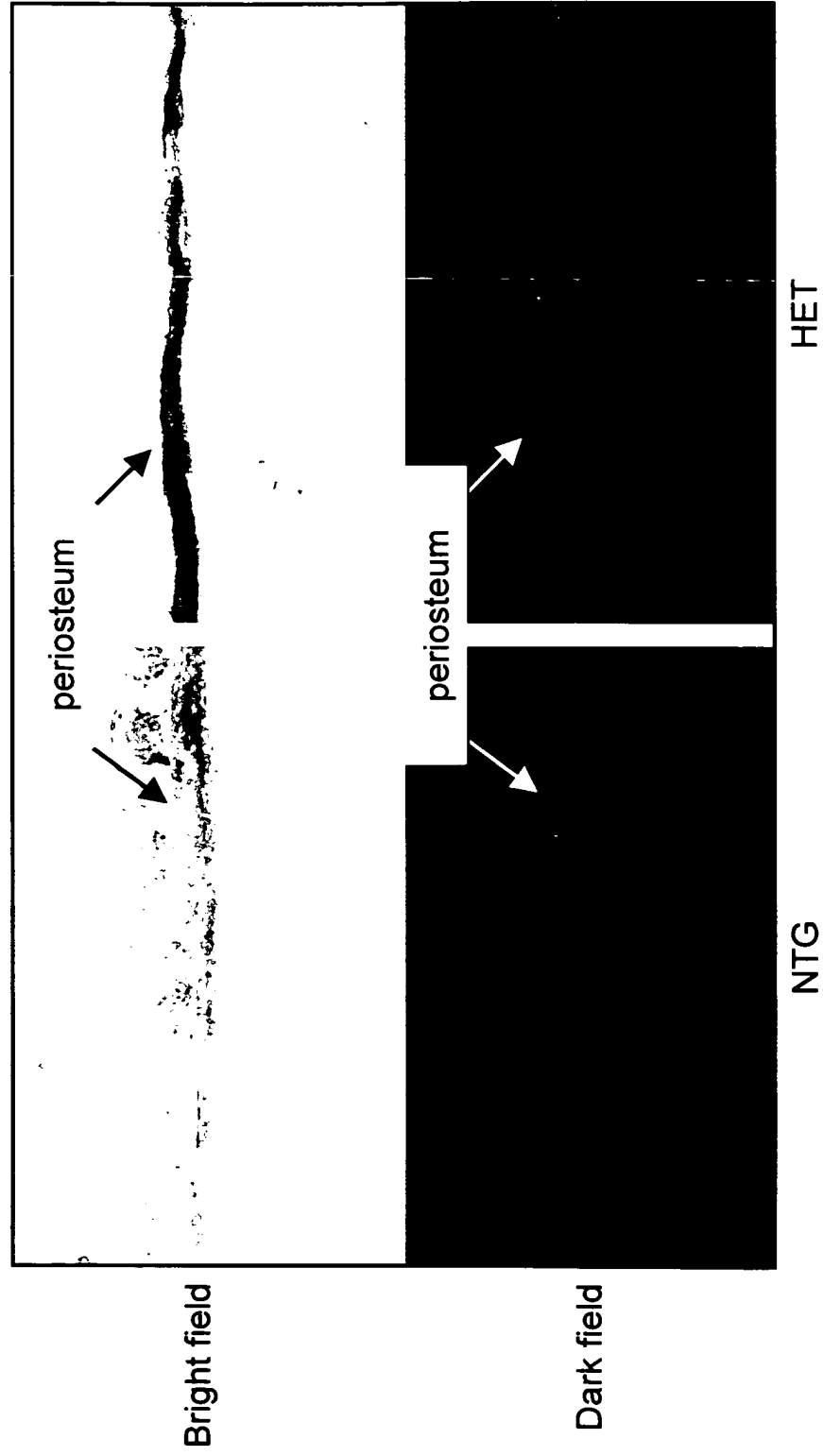


FIG.24

PAIGB Protein Expression
PAIGB Mice: Line 2 (9 wk)

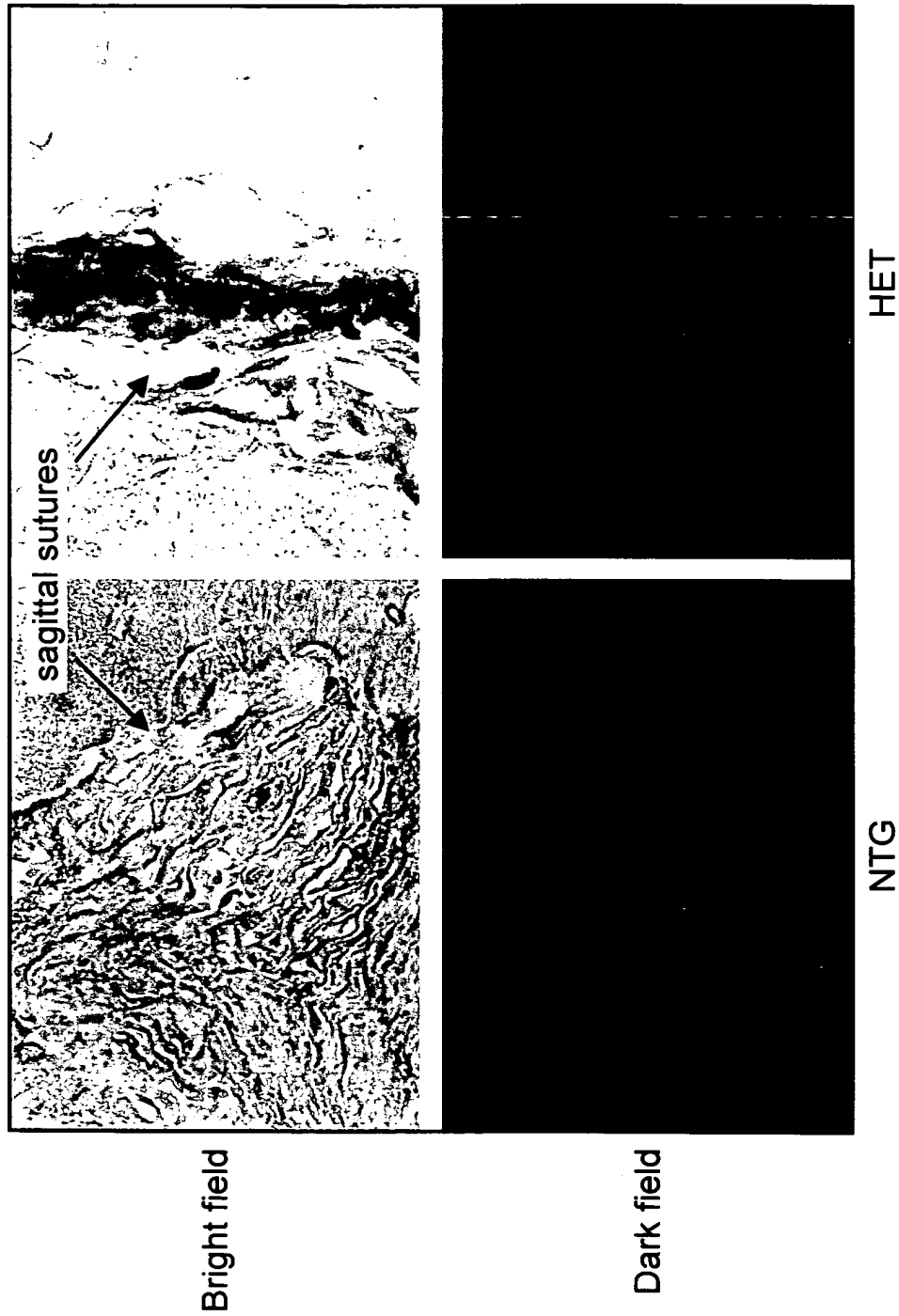


FIG. 25

Alkaline Phosphatase Activity
PAIGB Mice: Line 2 (9 wk)

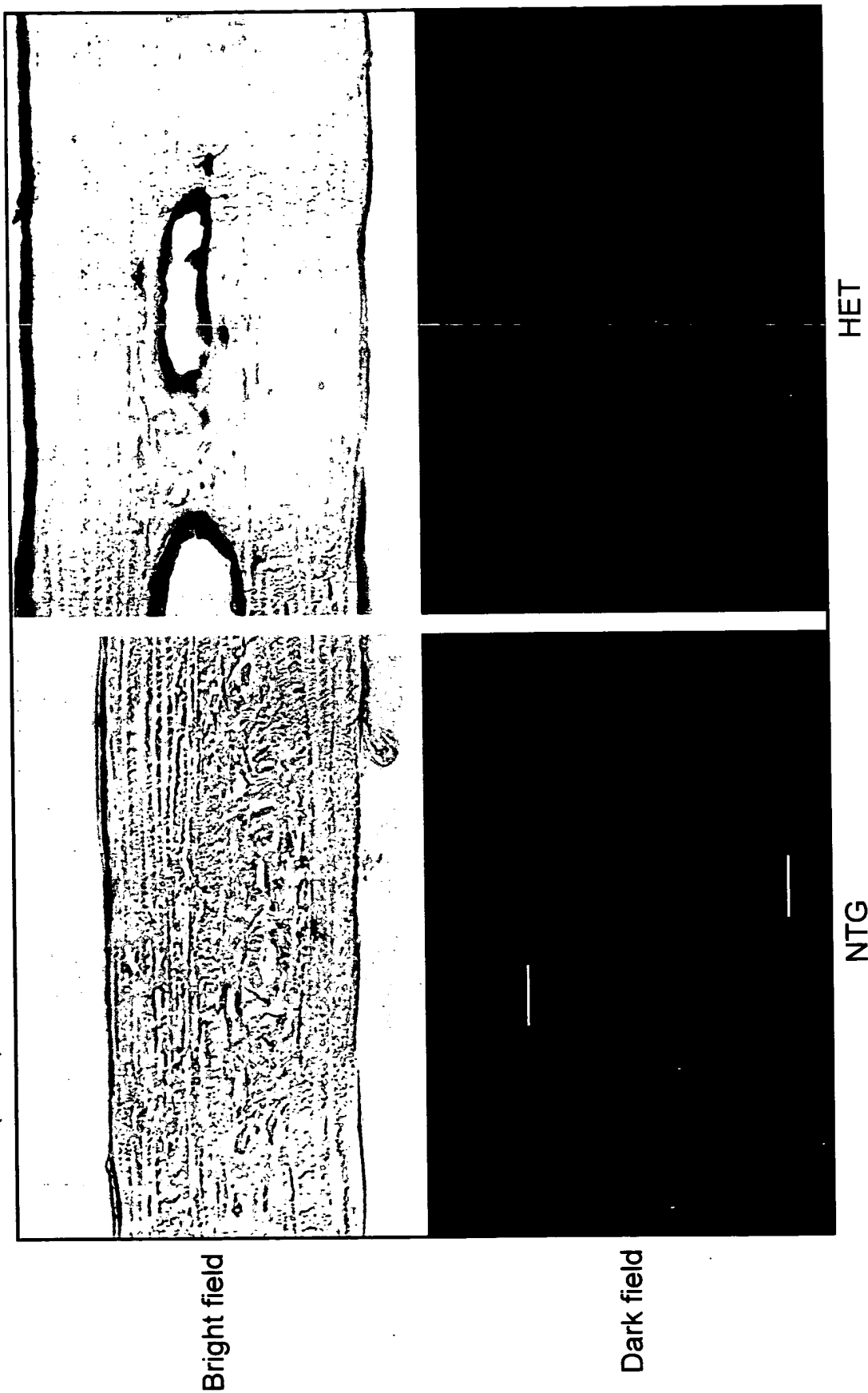


FIG.26

Alkaline Phosphatase Activity
PAIGB Mice: Line 54 (9 wk)

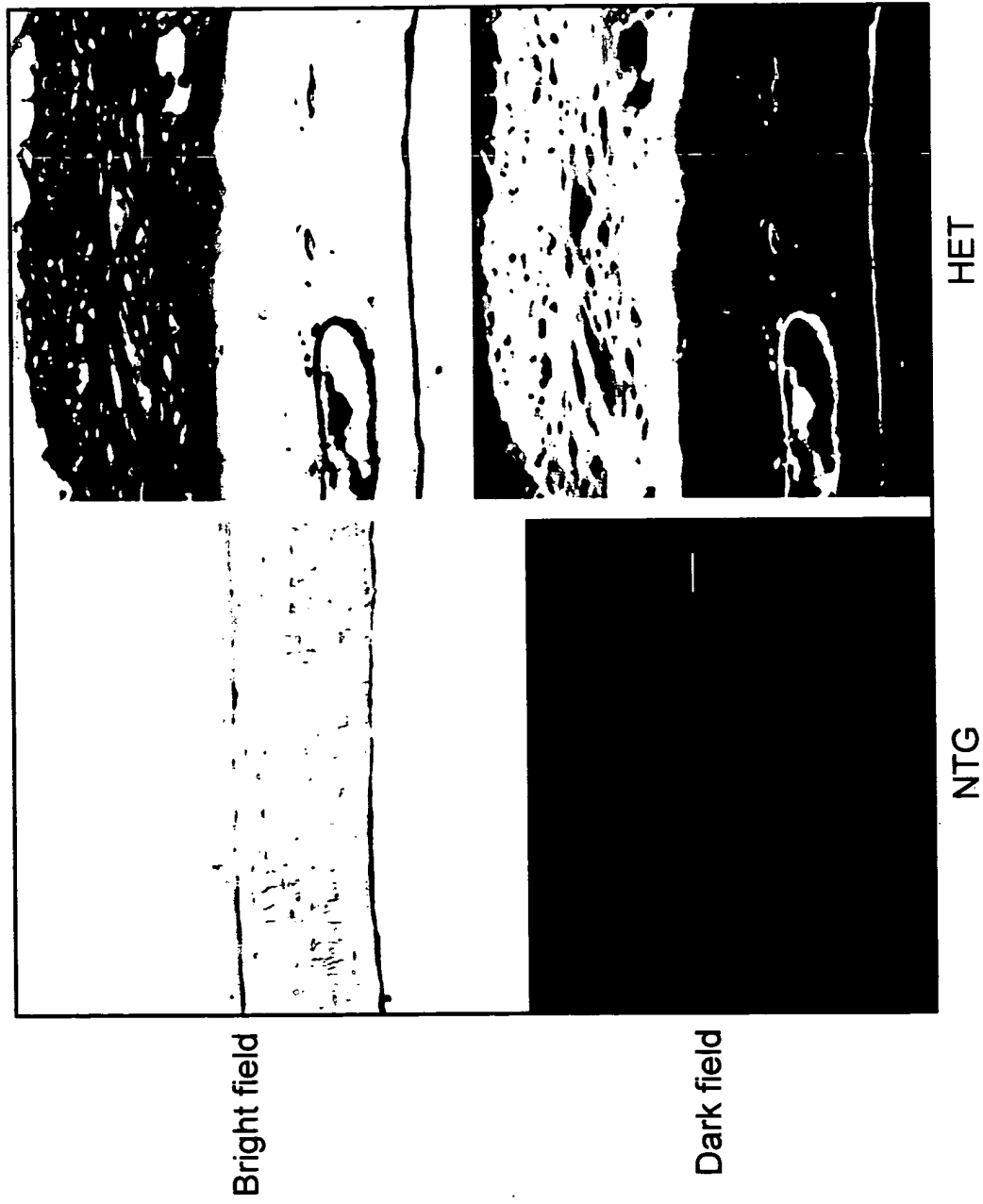


FIG.27